WILD TIMES

KIDS MAGAZINE

SUMMER 2018

INSIDE:

Become a citizen scientist

Try to match feathers with birds

Learn how to age teeth

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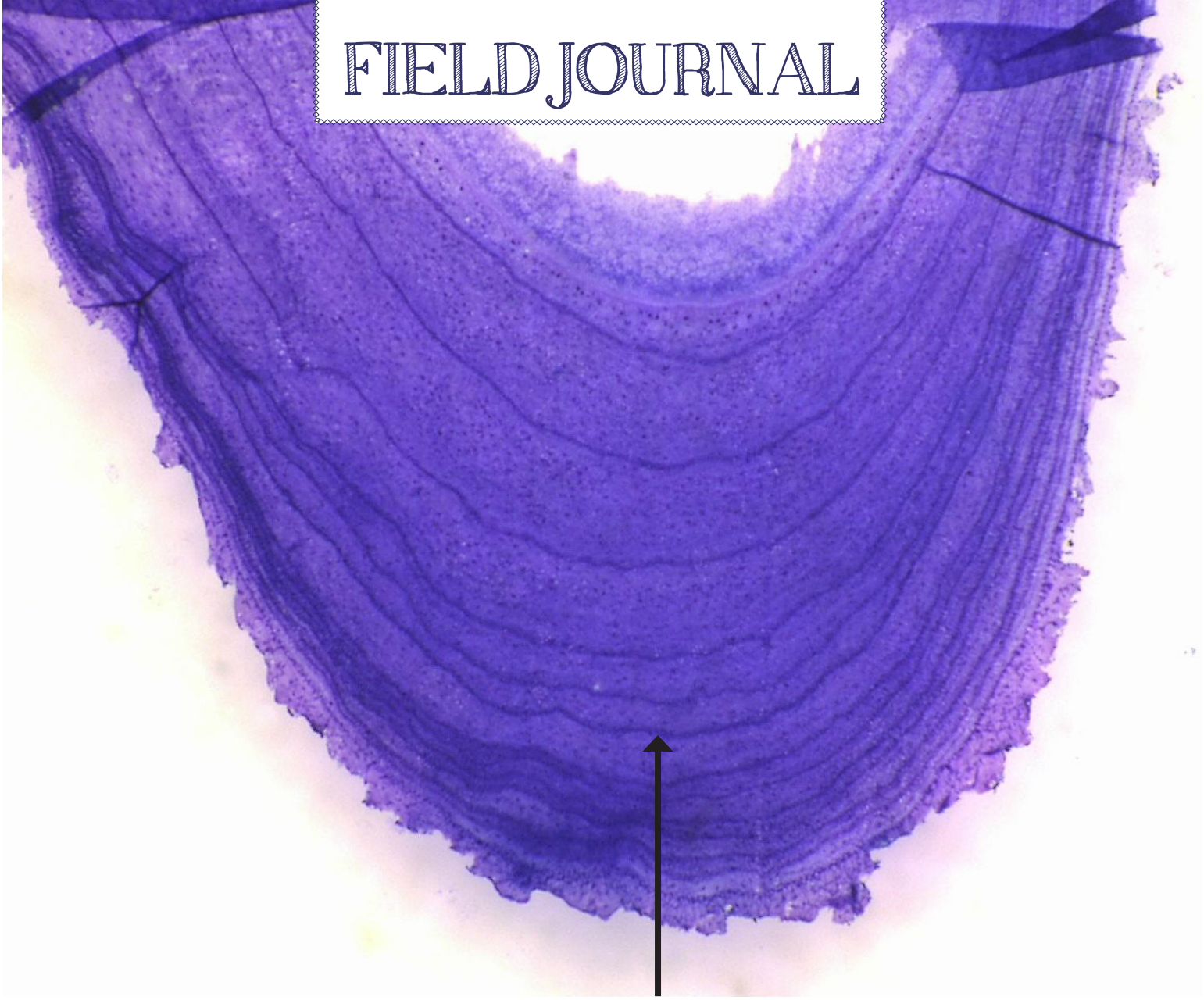
Help the Game and Fish

Anyone can help Game and Fish do science, including you! Some people think you have to be a professional biologist to help study and conserve wildlife, but that isn't the case. You can help scientists, like our biologists at Game and Fish, learn more about the animal and plant species in our state in lots of ways. When other people like you help collect observations and share them with scientists, it is called citizen science or community science. The more people who share good observations, the more information our biologists can use in their studies. If you want to help be a part of managing our wildlife with citizen science, check out the Outdoor Classroom section of this issue to learn how.



Can you tell how old this male Black Bear was based on the rings of cementum found in his tooth? *(Photo by WGFD)*

Use teeth to find the age of animals

Knowing how old animals are when they are harvested (which means hunted and used for its meat or hide) is an important part of keeping wildlife populations healthy. At the Game and Fish Forensics and Fish Health lab in Laramie, forensic scientists use teeth that hunters turn in from animals like deer, elk, bear, moose or bobcat to tell how old the animal was. When a hunter turns in a tooth to be aged, the first step is to slice a very thin section of the tooth off. A thin layer of bone-like tissue called "cementum" is formed on the tooth each year that the animal is alive. So, in order to age the tooth, the forensic scientists count these layers on the tooth. Each tooth slice is dyed to make the layers stand out. Just like rings in a tree, the rings in the root of the tooth will indicate the age of the animal.

FUN FACT!

The Game and Fish laboratory ages approximately 2,500 teeth per year.

WILDLIFE PROFILES

Moose (*Alces alces*)

Range: In North America, moose can be found across most of Canada, Alaska and the Northern United States. In Wyoming, moose are found in the mountain ranges of northwestern and western part of the state, as well as the Bighorn Mountains, Snowy Range Mountains and Sierra Madre Mountains.

Size: Moose are large, dark brown, and have long legs. Male moose, called a bull, in Wyoming can weigh up to 800 pounds and 7 feet tall. Female moose, called a cow, are usually a bit smaller than bulls.

Habitat: Moose like to spend their time near lakes, ponds or rivers where their favorite foods grow. In the summer, they might spend more time in forests with pine or fir trees in order to stay cool in the shade.

Young: Baby moose are called “calves.” Cows usually have one calf at a time in the late spring, around May. Moose calves weigh around 24 to 35 pounds at birth. Calves stay with their mother until new calves are born. Calves grow quickly, and can weigh 300 to 400 pounds by their first fall.

Predators: Healthy adult moose do not face predators often due to their large size. Wolves and grizzly bears can sometimes kill and eat weak adults or young calves.

Food: Moose are browsers, which means they like to eat the leaves, twigs, bark and buds of plants like willows and aspens. In the summer, moose will eat plants that live in the water including water lilies. Moose eat 40 to 60 pounds of food daily.

Did you know? The bell shaped flap of skin and hair that hangs down from a moose’s throat is called a dewlap or bell.

WILDLIFE PROFILES

Tiger Salamander (*Ambystoma tigrinum*)

Range: Tiger salamanders have widest range of any other North American salamander, from southeastern Alaska, across Canada and throughout all of the United States down to central Mexico.

Size: An average tiger salamander is 6-8 inches long. They have short snouts, thick bodies, sturdy legs and long tails.

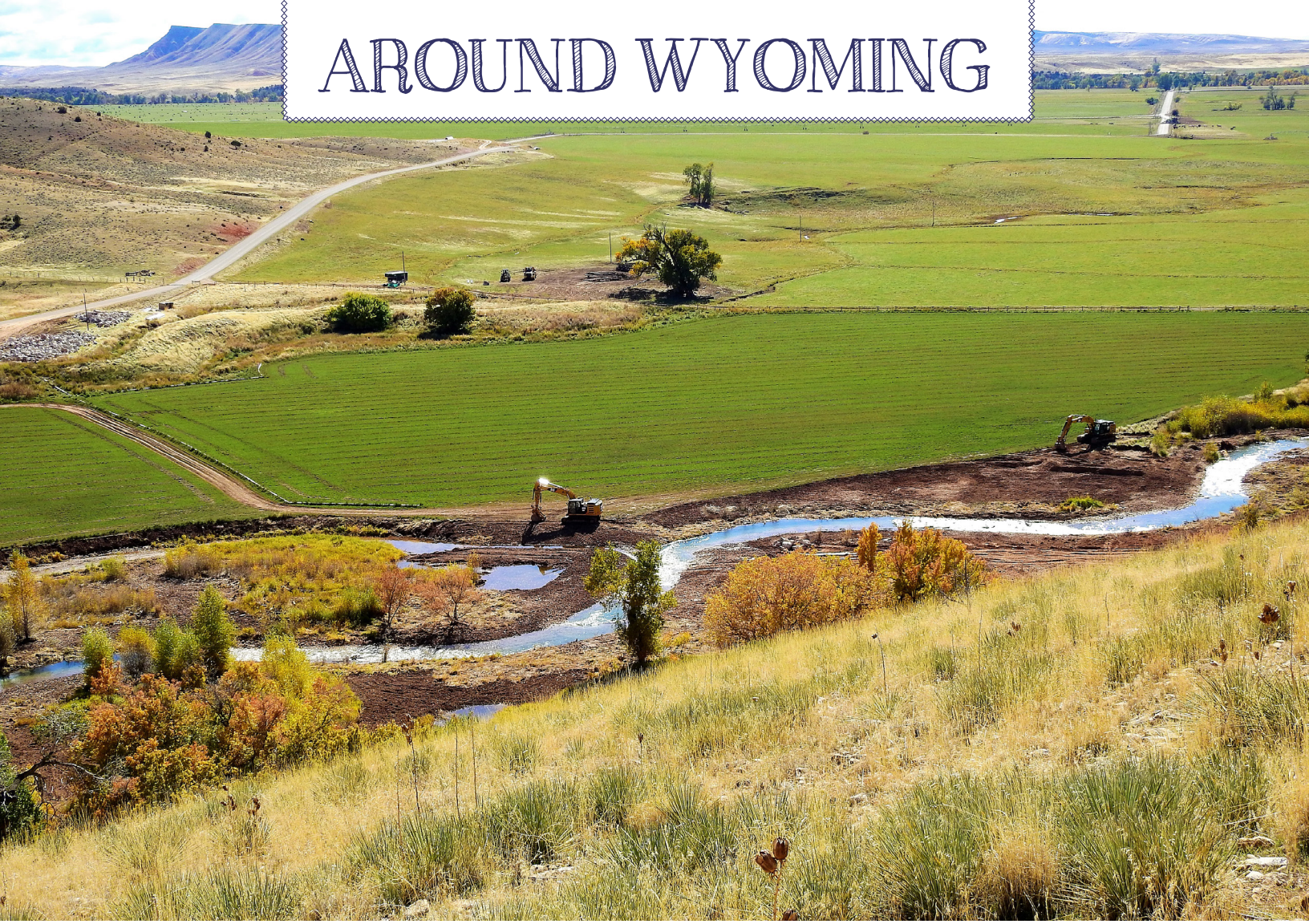
Habitat: Adult tiger salamanders live on land in forests, meadows, and marshes. They can be found under rocks, stumps, and in burrows. These salamanders live underground for most of their lives in burrows that they usually dig for themselves.

Young: Adults migrate to small ponds in late winter or early spring, usually after a warm rain. Eggs are laid in small pools and hatch after about 30 days. Just like frogs, salamanders are "amphibians," which means they start out living in water before they change body shape and live on land. The baby salamanders that live in the water are called larvae. The larvae live in water until they change into adults at 2.5 to 5 months of age and crawl out of the water to live on the land.

Predators: Adult tiger salamanders are eaten by badgers, raccoons, snakes, bobcats and owls. Young salamanders are eaten by aquatic insects, other salamanders and snakes.

Food: Their diets consist largely of small insects, frogs, baby snakes and worms.

Did you know? Tiger salamanders are the largest land-dwelling salamander in North America. Tiger salamanders are long-lived, averaging 10 to 16 years in the wild.



Construction crews work on restoring Medicine Lodge Creek so brown trout are able to swim upstream more easily to spawn.
(Photo by WGFD)

Medicine Lodge Creek Stream restoration

CODY — Medicine Lodge Creek in the Bighorn Mountains has been getting wider over the past seventy years. This is happening because as the stream flows, it slowly but steadily pulls some of the soil from the edge of the bank along with it. This is called erosion. This is a normal thing that happens in nature; but, sometimes when it happens faster than it should it can hurt the habitat for the animals that live in and around the stream.

Wyoming Game and Fish Department Aquatic Habitat Biologist Laura Burckhardt and other state partners are trying something called a "natural channel design" to fix this stream bank erosion. "There is almost a mile of stream that has moved because of erosion. Natural channel design restores a stream by copying natural conditions," said Burckhardt. "It solves all of the stream's issues at one time and allows the stream to return to the way it used to flow."

Game and Fish is working on the Medicine Lodge Wildlife Habitat Management Area to rebuild a stream channel and add new plants on the stream banks. The new and improved stream will have less eroding banks and will naturally stay healthy. And, what's good for the stream is also good for the fish. Medicine Lodge Creek has a lot of brown trout but they are all only 3 to 4 inches long. The work that is being done on the stream will make it so that these little fish can swim upstream more easily to spawn (which is what we call it when fish lay eggs). The stream will also end up with more places for little fish to hide. Game and Fish is hoping that this project will have lots of benefits for the wildlife and fish of Medicine Lodge Creek for many years to come.

Become a citizen scientist

Do you want to be a citizen scientist to study moose, butterflies, toads, bees and more? Check out *wyobio.org* to get involved.

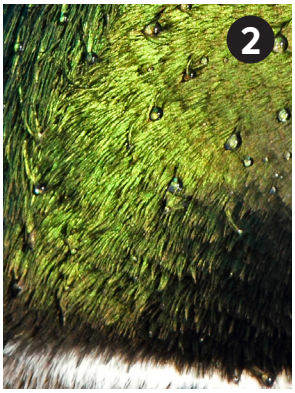
While you're at it, try using these skills to be a good scientist:

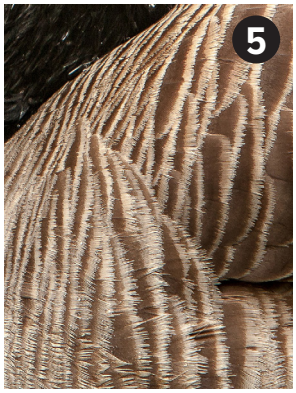
- Ask questions about things you notice.
- Make a prediction, which is a fancy way to say what you think is the answer to your question.
- Look closely and carefully, listen, and maybe even use your nose to smell! These are all ways to make observations.
- Share what you find out with others and become a citizen scientist!

TEST YOUR KNOWLEDGE

MATCH THE FEATHERS!

Use your best scientist skills to match each of these bird feather patterns to the correct bird:





Meadowlark **Pheasant** **Northern Flicker** **Canada Goose** **Mallard duck**

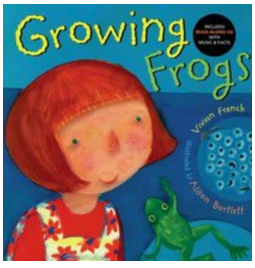
See more feathers at: *https://medium.com/@USFWS/a-closer-look-at-feathers-of-familiar-birds-aefd6ed3f8c4*

Answers:

1. Flicker
2. Mallard duck
3. Meadowlark
4. Pheasant
5. Canada Goose

LEARNING LINKS

Books to check out



Growing Frogs, by Vivian French

In this book, learn about a child's adventure in raising frogs from eggs to tadpoles to frogs.

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